THE OFFICE OF REGULATORY STAFF

DIRECT TESTIMONY & EXHIBITS

OF

GABY SMITH

AUGUST 18, 2017

DOCKET NO. 2017-3-E

Annual Review of Base Rates for Fuel Costs of Duke Energy Carolinas, LLC

DIRECT TESTIMONY AND EXHIBITS OF

GABY SMITH

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2017-3-E

IN RE: ANNUAL REVIEW OF BASE RATES FOR FUEL COSTS OF

DUKE ENERGY CAROLINAS, LLC

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND OCCUPATION.

A. My name is Gaby Smith. My business address is 1401 Main Street, Suite 900, Columbia, South Carolina 29201. I am employed by the State of South Carolina as an Audit Manager, in the Audit Department of the South Carolina Office of Regulatory Staff ("ORS").

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A. I received a Bachelor of Science Degree in Accounting from the University of South Carolina in May 2006. Prior to joining ORS, I held a variety of positions in finance, accounting and auditing. I began my employment as an auditor with ORS in July 2009 and have participated in various cases involving the regulation of electric, telecommunication, water and wastewater utilities.

Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA ("COMMISSION")?

A. Yes, I have previously testified before the Public Service Commission of South Carolina on the Fuel Adjustment Clause ("FAC") and water and electric general rate cases.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the results of ORS Audit Staff's examination of the books and records pertaining to Duke Energy Carolinas, LLC's ("DEC" or "Company") operations under the FAC. The current fuel examination covered the period of June 2016 through May 2017 ("actual review period") and four (4) months from June 2017 through September 2017 ("estimated review period").

Q. WHAT WAS THE PURPOSE OF THIS EXAMINATION?

A. The purpose of this examination was to verify that the Company's accounting practices in computing and applying the monthly FAC comply with S.C. Code Ann. § 58-27-865.

Q. WHAT WAS THE SCOPE OF ORS'S EXAMINATION?

A. ORS Audit Staff examined and verified the monthly fuel adjustment factor calculations and the fuel recovery balances recorded in the Company's books and records. The Audit Staff's examination consisted of the following:

1. Analyzing the Fuel Stock Account

   ORS Audit Staff's analysis of the Fuel Stock Account consisted of verifying receipts to and issues from the fuel management system to the general ledger, examining monthly fuel charges originating in fuel accounting, and ensuring only proper charges were entered in the Company's computation of fuel costs for purposes of adjusting the base fuel factor.

2. Sampling Receipts to the Fuel Stock Account

   ORS Audit Staff's review of receipts to the Fuel Stock Account consisted of examining and testing selected transactions which support additions to the account. Each transaction examined was tested for mathematical accuracy and vouched to a

commodity received report, corresponding waybill or truck bill, supplier invoice, base cost report, freight invoice, and transportation cost report. Transactions were then verified to a fuel management system payment voucher to verify payment of the correct amount to the vendors.

3. Verifying Charges to Nuclear Fuel Expenses

ORS Audit Staff verified the amounts of nuclear fuel expense to the books and records for the actual review period. Additionally, the accuracy of these amounts was verified to the Company's amortization schedules.

4. Verifying Purchased and Interchange Power Fuel Cost

ORS Audit Staff verified the Company's purchased and interchange power fuel cost, kilowatt-hour ("kWh") purchases, and kWh sales for the actual review period to the Company's "Intersystem Purchase and Sales Transaction" reports, individual vendor purchase schedules, and monthly invoices, on a sample basis. This verification included intercompany power transactions related to the Joint Dispatch Agreement between the Company and Duke Energy Progress, LLC. ORS recomputed the Company's sales and purchases for the actual review period. The purchased and interchange power amounts for the actual review period and the resultant (over)/under-recovery monthly deferred fuel amounts for the period reflect calculations that conform to S.C. Code Ann. § 58-27-865, the statute addressing fuel costs related to purchased power. Subsection (A)(2)(b) of this statute states that the total delivered cost of economy purchases, including, but not limited to, transmission charges, are included in purchased power costs if those purchases are "less than the purchasing utility's avoided variable costs for the generation of an equivalent quantity of electric power." ORS applied this statute

to the examined economic purchases along with the applicable avoided costs.

5. Verifying kWh Sales

ORS Audit Staff verified total system kWh sales, as filed in the monthly fuel factor computation, to monthly billed revenue reports for the actual review period. The monthly kWh sales figures were then used to determine the fuel cost per kWh sold and to compute the monthly S.C. retail allocation factors.

6. Recalculating the Fuel Adjustment Factors and Verifying the Deferred Fuel Costs

ORS Audit Staff recalculated the fuel costs for the actual review period utilizing information obtained from the Company and verified these costs to the Company's books and records. In recalculating the monthly fuel costs, ORS divided adjusted system fuel costs by adjusted system kWh sales to arrive at fuel costs per kWh sold. The fuel costs billed were then subtracted from the actual fuel costs to compute the deferred fuel cost adjustments. The actual deferred fuel costs for each month were then verified to the Company's books and records.

7. Recalculating the True-up for the (Over)/Under-Recovered Fuel Costs

ORS Audit Staff analyzed and recomputed the cumulative (over)/under-recovery of the base fuel, environmental, Public Utility Regulatory Policy Act of 1978 ("PURPA") purchased power capacity, and Distributed Energy Resource Program ("DERP") avoided costs for the actual review period and (over)/under-recovery for the estimated review period. In addition, ORS recomputed the cumulative balance of the DERP incremental costs for the actual review period and the estimated review period.

Q. PLEASE EXPLAIN THE AUDIT EXHIBITS ATTACHED TO YOUR TESTIMONY.

A. ORS Audit Staff prepared audit exhibits from the Company's books and records, reflecting fuel costs during the actual review period. Specifically, these exhibits include the following:

AUDIT EXHIBIT GS-1: TOTAL FUEL RECEIVED AND WEIGHTED AVERAGE COST

This audit exhibit details total received cost for the actual review period of $1,028,640,175 for coal, #2 oil, and natural gas. ORS has also computed the weighted average cost of each type of fuel: coal ($80.32 per ton), #2 oil ($1.64 per gallon), and natural gas ($3.68 per thousand cubic feet ("MCF")).

AUDIT EXHIBIT GS-2: RECEIVED COAL - COST PER TON COMPARISON

This audit exhibit details the received cost per ton of coal for each month of the actual review period for Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and South Carolina Electric & Gas Company. For comparison purposes, ORS has shown the invoice cost per ton, freight cost per ton, total cost per ton, and the cost per thousand British thermal units ("MBTU").

AUDIT EXHIBIT GS-3: COST OF FUEL BURNED FOR ELECTRIC GENERATION

This audit exhibit details the per book cost of fuel burned for electric generation during the actual review period. The burned cost of each class of fuel is shown separately along with its percentage of total burned costs. These costs are used in the computations of the base fuel cost component.

AUDIT EXHIBIT GS-4: COST OF FUEL

This audit exhibit details ORS's computation of the total fuel cost applicable to the fuel recovery calculation. There are three (3) components included in this cost and they are as follows:

(1) Cost of Fuel Burned

(2) Fuel Cost of Purchased and Interchange Power

(3) Fuel Cost Recovered from Intersystem Sales

Cost of Fuel Burned – This amount is the total cost of all fossil and nuclear fuel burned during the actual review period and used in the base fuel component computation. A detailed breakdown of coal, #2 oil, natural gas, and nuclear fuel can be seen in Audit Exhibit GS-3.

Fuel Cost of Purchased and Interchange Power – This amount is the total fuel cost of monthly kWh purchases from other electric utilities or power marketers.

Fuel Cost Recovered from Intersystem Sales – This amount is the total fuel cost recovery related to kWhs sold to other electric utilities or power marketers during the period.

AUDIT EXHIBIT GS-5: COMPUTATION OF BASE FUEL (OVER)/UNDER-RECOVERY

This audit exhibit details the (over)/under-recovery of base fuel cost computations for the actual review period as well as fuel costs for the estimated review period. The exhibit also shows the computations of the actual and estimated cumulative (over)/under-recovery balances and various adjustments for June 2016 through September 2017.

AUDIT EXHIBIT GS-6: TOTAL REAGENT COSTS

This audit exhibit details the total reagent costs for the actual review period for magnesium hydroxide, calcium carbonate and other sorbents, ammonia and urea, lime/limestone, and

reagent savings. Each reagent cost type is shown separately along with its percentage of total reagent costs. These costs are used in the computations of the environmental cost component.

AUDIT EXHIBIT GS-7: DETAILS OF THE (OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS

This audit exhibit details the (over)/under-recovery of environmental cost computations for the actual review period for total reagent costs, emission allowances, off-system sales, and estimates of variable environmental costs for the estimated review period. The exhibit also shows the computation of the cumulative (over)/under-recovery balances for June 2016 through September 2017.

AUDIT EXHIBIT GS-8: DETAILS OF THE (OVER)/UNDER-RECOVERY OF PURPA PURCHASED POWER CAPACITY COSTS

This audit exhibit details the (over)/under-recovery of PURPA purchased power capacity cost computations by month. Due to the enactment of the Distributed Energy Resource Act ("Act 236"), effective June 2014, the avoided capacity component of PURPA purchased power costs is now required to be allocated and recovered as a separate component of the overall fuel factor in the same manner as environmental costs. The exhibit also shows the computation of the cumulative (over)/under- recovery balances for June 2016 through September 2017.

AUDIT EXHIBIT GS-9: DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS (OVER)/UNDER-RECOVERY

This audit exhibit details the DERP incremental costs for the actual and estimated review periods. ORS Audit Staff tested selected transactions for mathematical accuracy and then

verified to supporting documentation. DERP incremental costs are further explained in the testimony of ORS witness Dawn Hipp.

AUDIT EXHIBIT GS-10: DETAILS OF THE (OVER)/UNDER-RECOVERY OF DISTRIBUTED ENERGY RESOURCE PROGRAM AVOIDED COSTS

This audit exhibit details the DERP avoided costs computations by month for the actual and estimated review periods. The exhibit also shows the computations of the actual and estimated cumulative (over)/under-recovery balances for June 2016 through September 2017. DERP avoided costs are further explained in the testimony of ORS witness Dawn Hipp.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF FUEL COSTS IN EXHIBIT GS-5.

A. ORS Audit Exhibit GS-5 provides details of ORS's calculation of the actual cumulative under-recovery balance through May 2017, and the estimated balance through September 2017. The cumulative under-recovery amount as of May 2017 totaled $7,670,353. ORS then added estimated under-recoveries of $3,044,859 for June 2017, $5,121,529 for July 2017, $3,058,979 for August 2017, and an estimated over-recovery of $1,078,519 for September 2017, to arrive at a cumulative under-recovery of $17,817,201 through September 2017. Company witness McGee's testimony (McGee Exhibit 2, page 1) in this docket reports the cumulative under-recovery total through May 2017 as $7,670,353, and through September 2017, a cumulative under-recovery total of $17,817,203. The variance between ORS and the Company's ending balances for September 2017 is due to rounding.

Q. DID THE COMPANY MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE BASE FUEL COMPONENT?

A. Yes. The Company made the following adjustment as shown on Audit Exhibit GS-5:

Adjustment (1) – Purchased Power

In May 2017, the Company made an over-recovery adjustment of $100,880 to account for the differences between actual and estimated economic purchased power costs and revisions for those purchases with costs exceeding DEC's avoided variable cost. ORS agrees with the Company's adjustment to the base fuel component.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF ENVIRONMENTAL COSTS IN EXHIBIT GS-7.

A. ORS Audit Exhibit GS-7 provides details of ORS's calculation of the cumulative environmental cost over-recovery balance of $2,985,690 through May 2017. ORS then added estimated under-recoveries of $572,498 for June 2017, $690,192 for July 2017, $681,856 for August 2017, and $514,542 for September 2017, to arrive at a cumulative over-recovery balance of $526,602 through September 2017. Company witness McGee's testimony (Exhibit 4, pages 1a through 3b) in this docket reports the cumulative environmental cost over-recovery total through May 2017 as $2,985,686 and over-recovery through September 2017 as $526,599. Variances between ORS and the Company's ending balances for May 2017 and September 2017 are due to rounding.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF PURPA PURCHASED POWER CAPACITY COSTS IN EXHIBIT GS-8.

A. ORS Audit Exhibit GS-8 provides details of ORS's calculation of the cumulative PURPA purchased power capacity cost under-recovery balance of $792,575 through May 2017. ORS then added estimated over-recoveries of $241,915 for June 2017, $356,556 for July 2017, $388,749 for August 2017, and $319,076 for September 2017, to arrive at a cumulative over-recovery of $513,721 as of September 2017. Company witness McGee's testimony (Exhibit 6, pages 1a through 3b) reports the under-recovery total through May 2017 as $792,577, and through September 2017, a cumulative over-recovery total of $513,718. Variances between ORS and the Company's ending balances for May 2017 and September 2017 are due to rounding.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COSTS.

A. ORS Audit Exhibit GS-9 provides details of ORS's calculation of the cumulative DERP incremental cost over-recovery balance of $4,214,126 through May 2017. ORS then added estimated under-recoveries of $302,740 for June 2017, $362,171 for July 2017, $413,591 for August 2017, and $463,316 for September 2017, and ORS adjustments, to arrive at a cumulative over-recovery of $4,496,927 as of September 2017. Company witness McGee's testimony (Exhibit 10, pages 1 through 3) reports the over-recovery total through May 2017 as $4,071,980 and through September 2017, a cumulative over-recovery

total of $2,530,162. Variances between ORS and the Company's ending balances for May 2017 and September 2017 are due to due ORS Adjustments (2) and (3), and rounding.

Q. DID ORS MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE DISTRIBUTED ENERGY RESOURCE PROGRAM INCREMENTAL COST COMPONENT?

A. Yes. ORS made the following adjustments as shown on Audit Exhibit GS-9:

Adjustment (2) – Solar Rebates and Carrying Cost

In May 2017, ORS made an over-recovery adjustment of $142,149 to solar rebate amortization and carrying costs. This adjustment is further explained by ORS witness Dawn Hipp.

Adjustment (3) – Reduction of Costs for Estimated Period

In September 2017, ORS made an over-recovery adjustment of $1,824,619 to the estimated period to better align estimated costs with DEC's actual historical experience. This adjustment is further explained by ORS witness Dawn Hipp.

Q. PLEASE EXPLAIN ORS AUDIT STAFF'S COMPUTATION OF THE CUMULATIVE (OVER)/UNDER-RECOVERY OF DISTRIBUTED ENERGY RESOURCE PROGRAM AVOIDED COSTS.

A. ORS Audit Exhibit GS-10 provides details of ORS's calculation of the cumulative DERP avoided cost over-recovery balance of $235,096 through May 2017. ORS then added estimated under-recoveries of $26,892 for June 2017, $29,783 for July 2017, $31,044 for August 2017, and $28,829 for September 2017, to arrive at a cumulative over-recovery of $118,548 as of September 2017. Company witness McGee's testimony (Exhibit 12, pages 1 through 3) reports the over-recovery total through May 2017 as

$234,426 and through September 2017, a cumulative over-recovery total of $117,879. Variances between ORS and the Company's ending balances for May 2017 and September 2017 are due to ORS Adjustment (4), and rounding.

Q. DID ORS MAKE ANY ADJUSTMENTS OR TRUE-UPS DURING EITHER THE ACTUAL OR THE ESTIMATED REVIEW PERIODS FOR THE DERP AVOIDED COST COMPONENT?

A. Yes. ORS made the following adjustment as shown on Audit Exhibit GS-10:

Adjustment (4) – Avoided Costs for Excess Energy Credits

In May 2017, ORS made an over-recovery adjustment of $668 to account for an overpayment of NEM excess energy payments. This adjustment is further explained by ORS witness Dawn Hipp.

Q. WHAT IS THE RESULT OF ORS'S EXAMINATION?

A. Based on ORS's examination of the Company's books and records, and the Company's operations under the fuel cost recovery mechanism, ORS determined that, subject to ORS's accounting adjustments, the Company's accounting practices are in compliance with S.C. Code Ann. § 58-27-865.

Based on ORS's examination, ORS agrees with the following (over)/under-recovery balances as stated by DEC:

- May 2017 fuel cost component under-recovery of $7,670,353;
- May 2017 environmental cost component over-recovery balance of $2,985,686;
- May 2017 PURPA purchased power capacity cost component under-recovery balance of $792,577;
- September 2017 fuel cost component under-recovery of $17,817,203;

- September 2017 environmental cost component over-recovery balance of $526,599; and
- September 2017 PURPA purchased power capacity cost component over-recovery balance of $513,718.

Based on ORS's examination, ORS calculated the following adjusted under-recovery balances for DEC:

- May 2017 DERP incremental cost over-recovery balance of $4,214,126;
- May 2017 DERP avoided cost over-recovery balance of $235,096;
- September 2017 DERP incremental cost over-recovery balance of $4,496,927; and
- September 2017 DERP avoided cost over-recovery balance of $118,548.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

Audit Exhibit GS-1

Office of Regulatory Staff
Total Fuel Received and Weighted Average Cost
Duke Energy Carolinas, LLC
For Year Ending May 2017
Docket No. 2017-3-E

Month	Coal		#2 Oil		Natural Gas		Total Received Cost
	Ton	$	Gal	$	MCF	$	$
Jun-16	589,911	51,714,750	820,037	1,290,237	6,502,634	21,896,908	**74,901,895**
Jul-16	665,318	52,599,961	487,447	721,576	8,611,008	29,785,680	**83,107,217**
Aug-16	878,132	70,450,261	792,697	1,199,306	8,727,139	29,468,032	**101,117,599**
Sep-16	831,109	66,851,490	528,216	807,148	8,346,242	29,390,149	**97,048,787**
Oct-16	781,894	61,487,569	415,206	688,055	5,262,524	19,630,059	**81,805,683**
Nov-16	704,324	55,998,051	478,653	745,402	8,503,449	28,252,192	**84,995,645**
Dec-16	356,548	47,959,329	935,128	1,634,868	5,866,647	24,271,350	**73,865,547**
Jan-17	778,038	58,590,024	2,001,478	3,293,512	5,989,278	26,429,470	**88,313,006**
Feb-17	804,647	61,727,069	591,753	1,026,515	5,867,838	22,905,813	**85,659,397**
Mar-17	845,345	63,161,633	694,147	1,159,216	6,623,209	24,932,965	**89,253,814**
Apr-17	884,851	66,278,049	386,845	816,691	4,054,460	15,801,132	**82,895,872**
May-17	812,539	60,644,821	735,779	1,170,315	6,311,412	23,860,577	**85,675,713**
Total	**8,932,656**	**$ 717,463,007**	**8,867,386**	**$ 14,552,841**	**80,665,840**	**$ 296,624,327**	**$ 1,028,640,175**
Weighted Average Cost		**$ 80.32**		**$ 1.64**		**$ 3.68**	

Office of Regulatory Staff
Received Coal - Cost Per Ton Comparison
Duke Energy Carolinas, LLC
For Year Ending May 2017
Docket No. 2017-3-E

	Duke Energy Carolinas, LLC				Duke Energy Progress, LLC[1]				South Carolina Electric & Gas Company[1]			
Month	Invoice Cost Per Ton $	Freight Cost Per Ton $	Total Cost Per Ton $	Cost Per MBTU $	Invoice Cost Per Ton $	Freight Cost Per Ton $	Total Cost Per Ton $	Cost Per MBTU $	Invoice Cost Per Ton $	Freight Cost Per Ton $	Total Cost Per Ton $	Cost Per MBTU $
Jun-16	57.92	32.04	89.96	3.62	53.65	26.81	80.46	3.18	54.71	38.95	93.66	3.64
Jul-16	51.71	26.27	77.98	3.15	47.44	30.81	78.25	3.07	59.25	18.53	77.78	3.06
Aug-16	49.95	30.29	80.24	3.26	46.53	30.02	76.55	3.01	41.74	35.74	77.48	3.04
Sep-16	50.52	30.00	80.52	3.31	47.89	31.32	79.21	3.16	51.12	28.42	79.54	3.12
Oct-16	49.14	27.89	77.03	3.17	48.18	29.80	77.98	3.06	53.34	35.57	88.91	3.49
Nov-16	49.34	32.29	81.63	3.41	42.10	26.51	68.61	2.68	51.81	31.14	82.95	3.24
Dec-16	78.87	53.34	132.21	5.42	53.48	34.01	87.49	3.46	53.00	27.04	80.04	3.14
Jan-17	47.21	26.81	74.02	3.00	47.12	29.41	76.53	3.05	54.30	28.56	82.86	3.26
Feb-17	45.72	33.10	78.82	3.19	46.95	34.88	81.83	3.25	56.57	31.49	88.06	3.45
Mar-17	45.78	30.15	75.93	3.08	47.56	33.10	80.66	3.19	54.73	27.65	82.38	3.23
Apr-17	46.53	28.40	74.93	3.01	48.24	35.08	83.32	3.32	54.98	26.82	81.80	3.21
May-17	45.95	28.11	74.06	3.01	49.24	32.91	82.15	3.28	55.37	27.29	82.66	3.25

[1] **Cost information for Duke Energy Progress, LLC and South Carolina Electric & Gas Company has not been audited as part of this docket.**

Office of Regulatory Staff
Cost of Fuel Burned for Electric Generation
Duke Energy Carolinas, LLC
For Year Ending May 2017
Docket No. 2017-3-E

Month	Coal		#2 Oil		Natural Gas		Nuclear		Total Burned Cost
Jun-16	$ 96,076,982	67.50%	$ 1,056,667	0.75%	$ 21,968,719	15.43%	$ 23,234,853	16.32%	$ 142,337,221
Jul-16	113,287,067	67.40%	948,799	0.56%	29,861,869	17.76%	24,005,275	14.28%	168,103,010
Aug-16	111,100,156	67.10%	982,445	0.60%	29,537,283	17.84%	23,949,442	14.46%	165,569,326
Sep-16	80,850,619	58.36%	885,673	0.64%	29,459,483	21.26%	27,356,718	19.74%	138,552,493
Oct-16	54,227,874	51.73%	770,899	0.74%	19,630,059	18.72%	30,196,800	28.81%	104,825,632
Nov-16	41,512,258	43.02%	692,943	0.72%	28,253,193	29.29%	26,017,979	26.97%	96,476,373
Dec-16	80,246,141	58.97%	1,643,328	1.20%	24,271,350	17.84%	29,926,043	21.99%	136,086,862
Jan-17	72,667,448	55.70%	1,420,805	1.09%	26,429,470	20.26%	29,942,141	22.95%	130,459,864
Feb-17	38,929,171	43.37%	3,118,354	3.48%	22,905,813	25.52%	24,802,206	27.63%	89,755,544
Mar-17	65,915,098	54.92%	996,976	0.83%	24,932,965	20.78%	28,164,486	23.47%	120,009,525
Apr-17	62,709,345	61.28%	822,765	0.80%	15,801,132	15.44%	23,003,957	22.48%	102,337,199
May-17	64,137,159	55.17%	1,421,001	1.22%	23,860,577	20.53%	26,827,372	23.08%	116,246,109
Total	**$ 881,659,318**	**58.36%**	**$ 14,760,655**	**0.98%**	**$ 296,911,913**	**19.65%**	**$ 317,427,272**	**21.01%**	**$ 1,510,759,158**

Office of Regulatory Staff
Cost of Fuel
Duke Energy Carolinas, LLC
For Year Ending May 2017
Docket No. 2017-3-E

Month	Cost of Fuel Burned	Fuel Cost of Purchased and Interchange Power	Fuel Cost Recovered from Intersystem Sales	Total Fuel Costs
Jun-16	$ 142,337,221	$ 22,308,304	$ (1,112,785)	$ 163,532,740
Jul-16	$ 168,103,010	$ 32,850,720	$ (2,540,954)	$ 198,412,776
Aug-16	$ 165,569,326	$ 27,807,518	$ (3,838,340)	$ 189,538,504
Sep-16	$ 138,552,493	$ 29,517,705	$ (3,141,707)	$ 164,928,491
Oct-16	$ 104,825,632	$ 19,367,798	$ (7,304,808)	$ 116,888,622
Nov-16	$ 96,476,373	$ 25,680,129	$ (2,764,221)	$ 119,392,281
Dec-16	$ 136,086,862	$ 16,341,877	$ (7,365,802)	$ 145,062,937
Jan-17	$ 130,459,864	$ 21,849,135	$ (4,175,582)	$ 148,133,417
Feb-17	$ 89,755,544	$ 24,343,437	$ (1,096,332)	$ 113,002,649
Mar-17	$ 120,009,525	$ 19,658,171	$ (10,543,257)	$ 129,124,439
Apr-17	$ 102,337,199	$ 18,817,130	$ (8,852,934)	$ 112,301,395
May-17	$ 116,246,109	$ 16,800,121	$ (4,859,385)	$ 128,186,845
Total	**$ 1,510,759,158**	**$ 275,342,045**	**$ (57,596,107)**	**$ 1,728,505,096**

Office of Regulatory Staff
Computation of Base Fuel (Over)/Under-Recovery
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual								
	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
Fossil Fuel	$ 119,102,368	$ 144,097,735	$ 141,619,884	$ 111,195,775	$ 74,628,832	$ 70,458,394	$ 106,160,819	$ 100,517,723
Nuclear Fuel	$ 23,234,853	$ 24,005,275	$ 23,949,442	$ 27,356,718	$ 30,196,800	$ 26,017,979	$ 29,926,043	$ 29,942,141
Purchased & Interchange Power	$ 22,308,304	$ 32,850,720	$ 27,807,518	$ 29,517,705	$ 19,367,798	$ 25,680,129	$ 16,341,877	$ 21,849,135
Total Cost of Fuel Burned	$ 164,645,525	$ 200,953,730	$ 193,376,844	$ 168,070,198	$ 124,193,430	$ 122,156,502	$ 152,428,739	$ 152,308,999
Less: Fuel Cost Recovered from Intersystem Sales	$ (1,112,785)	$ (2,540,954)	$ (3,838,340)	$ (3,141,707)	$ (7,304,808)	$ (2,764,221)	$ (7,365,802)	$ (4,175,582)
Total Fuel Costs	$ 163,532,740	$ 198,412,776	$ 189,538,504	$ 164,928,491	$ 116,888,622	$ 119,392,281	$ 145,062,937	$ 148,133,417
Eliminate Avoided Fuel Benefit of SC NEM	$ 16,099	$ 19,470	$ 27,878	$ 36,471	$ 37,743	$ 47,069	$ 50,957	$ 63,251
Adjusted System Fuel Costs	$ 163,548,839	$ 198,432,246	$ 189,566,382	$ 164,964,962	$ 116,926,365	$ 119,439,350	$ 145,113,894	$ 148,196,668
Total System kWh Sales	7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842	6,894,316,081	7,535,755,155
Eliminate NEM Solar Generation kWh	398,685	482,160	690,410	903,241	1,165,336	1,453,248	1,573,308	1,952,860
Adjusted System kWh Sales	7,456,125,575	8,308,176,776	8,678,035,332	8,553,374,584	6,765,843,077	6,212,796,090	6,895,889,389	7,537,708,015
Fuel Costs per kWh Sales	$ 0.021935	$ 0.023884	$ 0.021844	$ 0.019287	$ 0.017282	$ 0.019225	$ 0.021044	$ 0.019661
S.C. Retail kWh Sales	1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183	1,681,764,571	1,778,680,433
Eliminate NEM Solar Generation kWh	398,685	482,160	690,410	903,241	1,165,336	1,453,248	1,573,308	1,952,860
Adjusted S.C. Retail kWh Sales	1,887,789,467	2,087,905,983	2,121,609,695	2,102,968,250	1,734,040,758	1,594,181,431	1,683,337,879	1,780,633,293
S.C. Base Fuel Costs	$ 41,408,339	$ 49,867,484	$ 46,345,267	$ 40,558,971	$ 29,967,453	$ 30,647,714	$ 35,423,381	$ 35,008,509
Less: Avoided Fuel Benefit of S.C. NEM	$ (16,099)	$ (19,470)	$ (27,878)	$ (36,471)	$ (37,743)	$ (47,069)	$ (50,957)	$ (63,251)
Adjusted S.C. Base Fuel Costs	$ 41,392,240	$ 49,848,014	$ 46,317,389	$ 40,522,500	$ 29,929,710	$ 30,600,645	$ 35,372,424	$ 34,945,258
S.C. Retail Fuel Costs Collected	$ 40,478,870	$ 44,768,979	$ 45,487,356	$ 45,082,988	$ 27,512,863	$ 25,287,745	$ 26,701,376	$ 28,240,109
Less: Fuel Benefits in DERP NEM Incentive	$ (6,417)	$ (7,760)	$ (11,105)	$ (14,551)	$ (11,318)	$ (14,161)	$ (15,311)	$ (18,966)
Adjusted S.C. Retail Costs Collected	$ 40,472,453	$ 44,761,219	$ 45,476,251	$ 45,068,437	$ 27,501,545	$ 25,273,584	$ 26,686,065	$ 28,221,143
Deferred Fuel Entry- (Over)/Under-Recovery	$ 919,787	$ 5,086,795	$ 841,138	$ (4,545,937)	$ 2,428,165	$ 5,327,061	$ 8,686,359	$ 6,724,115
Cumulative (Over)/Under-Recovery-Prior Month	$ (35,017,066)	$ (34,097,279)	$ (29,010,484)	$ (28,169,346)	$ (32,715,283)	$ (30,287,118)	$ (24,960,057)	$ (16,273,698)
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery	$ (34,097,279)	$ (29,010,484)	$ (28,169,346)	$ (32,715,283)	$ (30,287,118)	$ (24,960,057)	$ (16,273,698)	$ (9,549,583)

Office of Regulatory Staff
Computation of Base Fuel (Over)/Under-Recovery
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual				Estimated			
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017
Fossil Fuel	$ 64,953,338	$ 91,845,039	$ 79,333,242	$ 89,418,737	$ 92,479,724	$ 112,707,324	$ 108,256,103	$ 84,593,811
Nuclear Fuel	$ 24,802,206	$ 28,164,486	$ 23,003,957	$ 26,827,372	$ 25,712,385	$ 26,457,619	$ 26,165,886	$ 24,068,628
Purchased & Interchange Power	$ 24,343,437	$ 19,658,171	$ 18,817,130	$ 16,800,121	$ 11,687,683	$ 13,295,996	$ 12,831,634	$ 13,516,641
Total Cost of Fuel Burned	$ 114,098,981	$ 139,667,696	$ 121,154,329	$ 133,046,230	$ 129,879,792	$ 152,460,939	$ 147,253,623	$ 122,179,080
Less: Fuel Cost Recovered from Intersystem Sales	$ (1,096,332)	$ (10,543,257)	$ (8,852,934)	$ (4,859,385)	$ (360,719)	$ (1,404,021)	$ (976,988)	$ (2,406,085)
Total Fuel Costs	$ 113,002,649	$ 129,124,439	$ 112,301,395	$ 128,186,845	$ 129,519,073	$ 151,056,918	$ 146,276,635	$ 119,772,995
Eliminate Avoided Fuel Benefit of SC NEM	$ 71,416	$ 80,635	$ 95,367	$ 102,715	$ 125,218	$ 135,791	$ 144,689	$ 153,588
Adjusted System Fuel Costs	$ 113,074,065	$ 129,205,074	$ 112,396,762	$ 128,289,560	$ 129,644,291	$ 151,192,709	$ 146,421,324	$ 119,926,583
Total System kWh Sales	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
Eliminate NEM Solar Generation kWh	2,204,928	2,489,592	2,944,428	3,171,324	3,865,972	4,192,397	4,467,138	4,741,880
Adjusted System kWh Sales	6,554,206,632	6,358,740,783	7,141,766,120	5,899,728,291	7,387,651,687	8,184,269,865	8,431,445,775	7,816,781,917
Fuel Costs per kWh Sales	$ 0.017252	$ 0.020319	$ 0.015738	$ 0.021745	$ 0.017549	$ 0.018474	$ 0.017366	$ 0.015342
S.C. Retail kWh Sales	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
Eliminate NEM Solar Generation kWh	2,204,928	2,489,592	2,944,428	3,171,324	3,865,972	4,192,397	4,467,138	4,741,880
Adjusted S.C. Retail kWh Sales	1,642,088,486	1,560,810,707	1,831,775,573	1,441,264,451	1,836,873,987	1,983,220,408	2,074,220,462	1,957,875,527
S.C. Base Fuel Costs	$ 28,329,534	$ 31,714,559	$ 28,828,394	$ 31,340,288	$ 32,234,901	$ 36,637,167	$ 36,021,118	$ 30,038,106
Less: Avoided Fuel Benefit of S.C. NEM	$ (71,416)	$ (80,635)	$ (95,367)	$ (102,715)	$ (125,218)	$ (135,791)	$ (144,689)	$ (153,588)
Adjusted S.C. Base Fuel Costs	$ 28,258,118	$ 31,633,924	$ 28,733,027	$ 31,237,573	$ 32,109,683	$ 36,501,376	$ 35,876,429	$ 29,884,518
S.C. Retail Fuel Costs Collected	$ 26,036,430	$ 24,741,464	$ 29,036,352	$ 22,832,604	$ 29,102,668	$ 31,421,028	$ 32,861,474	$ 31,009,903
Less: Fuel Benefits in DERP NEM Incentive	$ (21,403)	$ (24,192)	$ (28,621)	$ (30,808)	$ (37,844)	$ (41,181)	$ (44,024)	$ (46,866)
Adjusted S.C. Retail Costs Collected	$ 26,015,027	$ 24,717,272	$ 29,007,731	$ 22,801,796	$ 29,064,824	$ 31,379,847	$ 32,817,450	$ 30,963,037
Deferred Fuel Entry- (Over)/Under-Recovery	$ 2,243,091	$ 6,916,652	$ (274,704)	$ 8,435,777	$ 3,044,859	$ 5,121,529	$ 3,058,979	$ (1,078,519)
Cumulative (Over)/Under-Recovery-Prior Month	$ (9,549,583)	$ (7,306,492)	$ (389,840)	$ (664,544)	$ 7,670,353	$ 10,715,212	$ 15,836,741	$ 18,895,720
Company Accounting Adjustments	$ -	$ -	$ -	$ (100,880) (1)	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery	$ (7,306,492)	$ (389,840)	$ (664,544)	$ 7,670,353	$ 10,715,212	$ 15,836,741	$ 18,895,720	$ 17,817,201

Explanation of Adjustment (1) is included in testimony of Gaby Smith.

	May 2017	September 2017
Cumulative (Over)/Under Base Fuel Component (Audit Exhibit GS-5)	$ 7,670,353	$ 17,817,201
Cumulative (Over)/Under Environmental Component (Audit Exhibit GS-7)	$ (2,985,690)	$ (526,602)
Cumulative (Over)/Under PURPA Purchased Power Capacity Component (Audit Exhibit GS-8)	$ 792,575	$ (513,721)
Cumulative (Over)/Under Distributed Energy Resource Program Incremental Cost Component (Audit Exhibit GS-9)	$ (4,214,126)	$ (4,496,927)
Cumulative (Over)/Under Distributed Energy Resource Program Avoided Cost Component (Audit Exhibit GS-10)	$ (235,096)	$ (118,548)
Net Cumulative (Over)/Under-Recovery Balance	$ 1,028,016	$ 12,161,403

Office of Regulatory Staff
Total Reagent Costs
Duke Energy Carolinas, LLC
For Year Ending May 2017
Docket No. 2017-3-E

Month	Magnesium Hydroxide, Calcium Carbonate, and Other Sorbents		Ammonia and Urea		Lime/Limestone		Reagent Savings		Total Reagent Costs
Jun-16	$ 337,924	10.81%	$ 1,072,224	34.30%	$ 1,709,196	54.68%	$ 6,647	0.21%	$ 3,125,991
Jul-16	$ 336,888	9.01%	$ 1,037,683	27.76%	$ 2,370,867	63.43%	$ (7,554)	-0.20%	$ 3,737,884
Aug-16	$ 372,240	10.71%	$ 660,087	19.00%	$ 2,460,523	70.82%	$ (18,415)	-0.53%	$ 3,474,435
Sep-16	$ 285,362	10.58%	$ 717,078	26.58%	$ 1,690,042	62.64%	$ 5,726	0.21%	$ 2,698,208
Oct-16	$ 278,676	14.46%	$ 572,583	29.70%	$ 1,076,429	55.84%	$ -	0.00%	$ 1,927,688
Nov-16	$ 122,992	8.49%	$ 330,711	22.84%	$ 994,181	68.66%	$ -	0.00%	$ 1,447,884
Dec-16	$ 139,400	6.49%	$ 353,634	16.46%	$ 1,654,992	77.04%	$ -	0.00%	$ 2,148,026
Jan-17	$ 99,238	4.50%	$ 456,770	20.70%	$ 1,650,732	74.80%	$ -	0.00%	$ 2,206,740
Feb-17	$ 103,677	10.08%	$ 164,348	15.96%	$ 761,535	73.97%	$ -	0.00%	$ 1,029,560
Mar-17	$ 139,909	7.52%	$ 338,531	18.19%	$ 1,382,326	74.29%	$ -	0.00%	$ 1,860,766
Apr-17	$ 112,778	5.16%	$ 362,786	16.58%	$ 1,712,076	78.26%	$ -	0.00%	$ 2,187,640
May-17	$ 199,683	7.49%	$ 779,083	29.23%	$ 1,686,611	63.28%	$ -	0.00%	$ 2,665,377
Totals	**$ 2,528,767**	**8.87%**	**$ 6,845,518**	**24.01%**	**$ 19,149,510**	**67.17%**	**$ (13,596)**	**-0.05%**	**$ 28,510,199**

Office of Regulatory Staff
Details of the (Over)/Under-Recovery of Environmental Costs
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual								
	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
Total Reagent Costs	$ 3,125,991	$ 3,737,884	$ 3,474,435	$ 2,698,208	$ 1,927,688	$ 1,447,884	$ 2,148,026	$ 2,206,740
Emission Allowances	$ 3,877	$ 8,314	$ 8,552	$ 8,820	$ 6,888	$ (35,993)	$ 593	$ (78,012)
Less: Off-System Sales	$ (22,586)	$ (44,462)	$ (53,749)	$ (40,209)	$ (208,508)	$ (45,189)	$ (176,117)	$ (61,576)
Net Environmental Costs	$ 3,107,282	$ 3,701,736	$ 3,429,238	$ 2,666,819	$ 1,726,068	$ 1,366,702	$ 1,972,502	$ 2,067,152
S.C. Retail kWh Sales	1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183	1,681,764,571	1,778,680,433
Total System kWh Sales Excluding Off-System Sales	7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842	6,894,316,081	7,535,755,155
S.C Allocation Factor	25.31%	25.13%	24.44%	24.58%	25.62%	25.64%	24.39%	23.60%
S.C. Retail Basis of Total Environmental Costs	$ 786,597	$ 930,113	$ 838,175	$ 655,463	$ 442,159	$ 350,453	$ 481,162	$ 487,914
Amounts Billed to Retail Customers	$ 832,523	$ 990,824	$ 986,780	$ 957,570	$ 145,644	$ 123,514	$ 159,220	$ 182,779
(Over)/Under-Recovery	$ (45,926)	$ (60,711)	$ (148,605)	$ (302,107)	$ 296,515	$ 226,939	$ 321,942	$ 305,135
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery-Prior Month	$ (4,759,504)	$ (4,805,430)	$ (4,866,141)	$ (5,014,746)	$ (5,316,853)	$ (5,020,338)	$ (4,793,399)	$ (4,471,457)
Cumulative (Over)/Under-Recovery	$ (4,805,430)	$ (4,866,141)	$ (5,014,746)	$ (5,316,853)	$ (5,020,338)	$ (4,793,399)	$ (4,471,457)	$ (4,166,322)

Office of Regulatory Staff
Details of the (Over)/Under-Recovery of Environmental Costs
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual				Estimated			
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017
Total Reagent Costs	$ 1,029,560	$ 1,860,766	$ 2,187,640	$ 2,665,377	$ 2,942,207	$ 3,660,740	$ 3,582,790	$ 2,785,185
Emission Allowances	$ (5,521)	$ 190	$ 342	$ 437	$ 661	$ 816	$ 809	$ 618
Less: Off-System Sales	$ (14,423)	$ (378,524)	$ (283,531)	$ (117,389)	$ (5,493)	$ (21,381)	$ (14,878)	$ (36,641)
Net Environmental Costs	$ 1,009,616	$ 1,482,432	$ 1,904,451	$ 2,548,425	$ 2,937,375	$ 3,640,175	$ 3,568,721	$ 2,749,162
S.C. Retail kWh Sales	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
Total System kWh Sales Excluding Off-System Sales	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
S.C Allocation Factor	25.03%	24.52%	25.62%	24.39%	24.82%	24.19%	24.56%	25.00%
S.C. Retail Basis of Total Environmental Costs	$ 252,694	$ 363,438	$ 487,884	$ 621,528	$ 729,197	$ 880,677	$ 876,515	$ 687,334
Amounts Billed to Retail Customers	$ 143,346	$ 136,924	$ 135,607	$ 129,035	$ 156,699	$ 190,485	$ 194,659	$ 172,792
(Over)/Under-Recovery	$ 109,348	$ 226,514	$ 352,277	$ 492,493	$ 572,498	$ 690,192	$ 681,856	$ 514,542
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery-Prior Month	$ (4,166,322)	$ (4,056,974)	$ (3,830,460)	$ (3,478,183)	$ (2,985,690)	$ (2,413,192)	$ (1,723,000)	$ (1,041,144)
Cumulative (Over)/Under-Recovery	$ (4,056,974)	$ (3,830,460)	$ (3,478,183)	$ (2,985,690)	$ (2,413,192)	$ (1,723,000)	$ (1,041,144)	$ (526,602)

Office of Regulatory Staff
Details of the (Over)/Under-Recovery of PURPA Purchased Power Capacity Costs
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual							
	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
PURPA Purchased Power Capacity Costs	$ 1,946,097	$ 5,904,250	$ 5,706,971	$ 3,239,690	$ 2,360,132	$ 788,340	$ 746,982	$ 1,058,778
S.C. Retail kWh Sales	1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183	1,681,764,571	1,778,680,433
Total System kWh Sales Excluding Off-System Sales	7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842	6,894,316,081	7,535,755,155
S.C. Allocation Factor	25.31%	25.13%	24.44%	24.58%	25.62%	25.64%	24.39%	23.60%
S.C. Share of Capacity Costs	$ 492,648	$ 1,483,525	$ 1,394,900	$ 796,266	$ 604,584	$ 202,148	$ 182,215	$ 249,906
Amount Billed to Retail Customers	$ 469,021	$ 550,268	$ 549,910	$ 536,576	$ 703,249	$ 621,285	$ 728,377	$ 806,175
(Over)/Under-Recovery	$ 23,627	$ 933,257	$ 844,990	$ 259,690	$ (98,665)	$ (419,137)	$ (546,162)	$ (556,269)
Cumulative (Over)/Under-Recovery - Prior Month	$ 1,875,487	$ 1,899,114	$ 2,832,371	$ 3,677,361	$ 3,937,051	$ 3,838,386	$ 3,419,249	$ 2,873,087
Cumulative (Over)/Under-Recovery	$ 1,899,114	$ 2,832,371	$ 3,677,361	$ 3,937,051	$ 3,838,386	$ 3,419,249	$ 2,873,087	$ 2,316,818

	Actual				Estimated			
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017
PURPA Purchased Power Capacity Costs	$ 1,130,225	$ 1,144,637	$ 1,184,876	$ 983,474	$ 2,048,842	$ 2,095,126	$ 2,050,122	$ 1,979,735
S.C. Retail kWh Sales	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
Total System kWh Sales Excluding Off-System Sales	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
S.C. Allocation Factor	25.03%	24.52%	25.62%	24.39%	24.82%	24.19%	24.56%	25.00%
S.C. Share of Capacity Costs	$ 282,881	$ 280,623	$ 303,543	$ 239,856	$ 508,620	$ 506,879	$ 503,531	$ 494,965
Amount Billed to Retail Customers	$ 680,788	$ 648,180	$ 699,457	$ 602,721	$ 750,535	$ 863,435	$ 892,280	$ 814,041
(Over)/Under-Recovery	$ (397,907)	$ (367,557)	$ (395,914)	$ (362,865)	$ (241,915)	$ (356,556)	$ (388,749)	$ (319,076)
Cumulative (Over)/Under-Recovery - Prior Month	$ 2,316,818	$ 1,918,911	$ 1,551,354	$ 1,155,440	$ 792,575	$ 550,660	$ 194,104	$ (194,645)
Cumulative (Over)/Under-Recovery	$ 1,918,911	$ 1,551,354	$ 1,155,440	$ 792,575	$ 550,660	$ 194,104	$ (194,645)	$ (513,721)

Office of Regulatory Staff
Distributed Energy Resource Program Incremental Costs (Over)/Under-Recovery
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual							
	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
Purchased Power Agreements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NEM* Incentive	$ 20,401	$ 24,830	$ 33,245	$ 40,934	$ 58,784	$ 70,486	$ 77,323	$ 99,006
Solar Rebate Program	$ 10,875	$ 13,682	$ 21,811	$ 26,494	$ 31,779	$ 50,863	$ 59,445	$ 75,897
Shared Solar Program	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Carrying Costs on Deferred Amounts	$ 9,354	$ 12,326	$ 17,591	$ 24,544	$ 29,182	$ 41,454	$ 55,304	$ 67,759
NEM Avoided Capacity	$ 811	$ 980	$ 1,404	$ 1,836	$ 3,078	$ 3,838	$ 4,155	$ 5,602
NEM Meter Costs	$ 3,898	$ 4,681	$ 6,052	$ 7,370	$ 6,194	$ 7,344	$ 7,990	$ 10,130
General and Administrative Expenses	$ 102,184	$ 113,704	$ 101,872	$ 101,341	$ 92,650	$ 110,617	$ 75,327	$ 168,442
Total Incremental Costs	$ 147,523	$ 170,203	$ 181,975	$ 202,519	$ 221,667	$ 284,602	$ 279,544	$ 426,836
Revenue Collected	$ 361,697	$ 359,954	$ 359,722	$ 378,915	$ 576,639	$ 576,457	$ 576,950	$ 578,239
(Over)/Under Recovery	$ (214,174)	$ (189,751)	$ (177,747)	$ (176,396)	$ (354,972)	$ (291,855)	$ (297,406)	$ (151,403)
Cumulative (Over)/Under-Recovery - Prior Month	$ (1,867,198)	$ (2,081,372)	$ (2,271,123)	$ (2,448,870)	$ (2,625,266)	$ (2,980,238)	$ (3,272,093)	$ (3,569,499)
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative Balance	$ (2,081,372)	$ (2,271,123)	$ (2,448,870)	$ (2,625,266)	$ (2,980,238)	$ (3,272,093)	$ (3,569,499)	$ (3,720,902)

	Actual				Estimated			
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017
Purchased Power Agreements	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
NEM* Incentive	$ 112,891	$ 126,087	$ 148,502	$ 160,559	$ 244,117	$ 266,298	$ 285,342	$ 304,386
Solar Rebate Program	$ 87,288	$ 124,213	$ 133,327	$ 144,275	$ 163,677	$ 180,996	$ 195,426	$ 209,856
Shared Solar Program	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Carrying Costs on Deferred Amounts	$ 81,557	$ 105,752	$ 128,573	$ 137,090	$ 153,823	$ 170,594	$ 185,791	$ 199,429
NEM Avoided Capacity	$ 6,325	$ 7,142	$ 8,446	$ 9,097	$ 11,317	$ 13,127	$ 14,761	$ 16,401
NEM Meter Costs	$ 11,646	$ 12,848	$ 13,893	$ 15,309	$ 16,802	$ 18,371	$ 19,638	$ 20,918
General and Administrative Expenses	$ 115,338	$ 45,335	$ 121,271	$ 110,289	$ 290,397	$ 290,397	$ 290,397	$ 290,397
Total Incremental Costs	$ 415,045	$ 421,377	$ 554,012	$ 576,619	$ 880,133	$ 939,783	$ 991,355	$ 1,041,387
Revenue Collected	$ 578,434	$ 576,944	$ 585,187	$ 577,563	$ 577,393	$ 577,612	$ 577,764	$ 578,071
(Over)/Under Recovery	$ (163,389)	$ (155,567)	$ (31,175)	$ (944)	$ 302,740	$ 362,171	$ 413,591	$ 463,316
Cumulative (Over)/Under-Recovery - Prior Month	$ (3,720,902)	$ (3,884,291)	$ (4,039,858)	$ (4,071,033)	$ (4,214,126)	$ (3,911,386)	$ (3,549,215)	$ (3,135,624)
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ (142,149) (2)	$ -	$ -	$ -	$ (1,824,619) (3)
Cumulative Balance	$ (3,884,291)	$ (4,039,858)	$ (4,071,033)	$ (4,214,126)	$ (3,911,386)	$ (3,549,215)	$ (3,135,624)	$ (4,496,927)

* Net Energy Metering

Explanations of Adjustments (2) and (3) are included in testimony of Gaby Smith.

Office of Regulatory Staff
Details of the (Over)/Under-Recovery of Distributed Energy Resource Program Avoided Costs
Duke Energy Carolinas, LLC
June 2016 - September 2017
Docket No. 2017-3-E

	Actual							
	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016	January 2017
Purchased Power Agreements: 3rd Parties	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Purchased Power Agreements Program Participants	$ 175	$ 240	$ 224	$ 206	$ 203	$ 151	$ 132	$ 76
Total Avoided Costs	$ 175	$ 240	$ 224	$ 206	$ 203	$ 151	$ 132	$ 76
S.C. Retail kWh Sales	1,887,390,782	2,087,423,823	2,120,919,285	2,102,065,009	1,732,875,422	1,592,728,183	1,681,764,571	1,778,680,433
Total System kWh Sales Excluding Off-System Sales	7,455,726,890	8,307,694,616	8,677,344,922	8,552,471,343	6,764,677,741	6,211,342,842	6,894,316,081	7,535,755,155
S.C. Allocation Factor	25.31%	25.13%	24.44%	24.58%	25.62%	25.64%	24.39%	23.60%
S.C. Share of Avoided Costs	$ 44	$ 60	$ 55	$ 51	$ 52	$ 39	$ 32	$ 18
Amount Billed to Retail Customers	$ 38,657	$ 45,035	$ 45,086	$ 44,096	$ (25,246)	$ (22,910)	$ (25,270)	$ (27,232)
(Over)/Under-Recovery	$ (38,613)	$ (44,975)	$ (45,031)	$ (44,045)	$ 25,298	$ 22,949	$ 25,302	$ 27,250
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery - Prior Month	$ (263,642)	$ (302,255)	$ (347,230)	$ (392,261)	$ (436,306)	$ (411,008)	$ (388,059)	$ (362,757)
Cumulative (Over)/Under-Recovery	$ (302,255)	$ (347,230)	$ (392,261)	$ (436,306)	$ (411,008)	$ (388,059)	$ (362,757)	$ (335,507)

	Actual				Estimated			
	February 2017	March 2017	April 2017	May 2017	June 2017	July 2017	August 2017	September 2017
Purchased Power Agreements: 3rd Parties	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Purchased Power Agreements Program Participants	$ 75	$ 190	$ 166	$ 26,079	$ 348	$ 354	$ 338	$ 321
Total Avoided Costs	$ 75	$ 190	$ 166	$ 26,079	$ 348	$ 354	$ 338	$ 321
S.C. Retail kWh Sales	1,639,883,558	1,558,321,115	1,828,831,145	1,438,093,127	1,833,008,015	1,979,028,011	2,069,753,324	1,953,133,647
Total System kWh Sales Excluding Off-System Sales	6,552,001,704	6,356,251,191	7,138,821,692	5,896,556,967	7,383,785,715	8,180,077,468	8,426,978,637	7,812,040,037
S.C. Allocation Factor	25.03%	24.52%	25.62%	24.39%	24.82%	24.19%	24.56%	25.00%
S.C. Share of Avoided Costs	$ 19	$ 47	$ 43	$ 6,360	$ 86	$ 86	$ 83	$ 80
Amount Billed to Retail Customers	$ (24,242)	$ (23,009)	$ (26,247)	$ (21,112)	$ (26,806)	$ (29,697)	$ (30,961)	$ (28,749)
(Over)/Under-Recovery	$ 24,261	$ 23,056	$ 26,290	$ 27,472	$ 26,892	$ 29,783	$ 31,044	$ 28,829
Company Accounting Adjustments	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
ORS Accounting Adjustments	$ -	$ -	$ -	$ (668) (4)	$ -	$ -	$ -	$ -
Cumulative (Over)/Under-Recovery - Prior Month	$ (335,507)	$ (311,246)	$ (288,190)	$ (261,900)	$ (235,096)	$ (208,204)	$ (178,421)	$ (147,377)
Cumulative (Over)/Under-Recovery	$ (311,246)	$ (288,190)	$ (261,900)	$ (235,096)	$ (208,204)	$ (178,421)	$ (147,377)	$ (118,548)